

AN 1981:597131 CAPLUS
DN 95:197131
TI Absorption of lanthanum by the enamel surface of rat teeth
AU Kobayashi, Yasuko; Ozeki, Masami; Yagi, Toshiharu; Hosoi, Tatsuoki;
Yoshizaki, Nobuya; Sakurai, Yasuo
CS Sch. Dent., Aichi-Gakuin Univ., Nagoya, 464, Japan
SO Shika Kiso Igakkai Zasshi (1981), 23(2), 253-61
CODEN: SHKKAN; ISSN: 0385-0137
DT Journal
LA Japanese
AB $\text{La}(\text{NO}_3)_3$ soln. (8%) applied to teeth of rats once a day for 2 wk prevented caries formation, displaced Ca^{2+} in the enamel surface by La^{3+} , and formed LaPO_4 , $\text{La}_4(\text{P}_2\text{O}_7)_3$, $\text{LaP}_5\text{O}_{14}$, and $\text{LaHP}_2\text{O}_7 \cdot 3\text{H}_2\text{O}$. $\text{La}(\text{NO}_3)_3$ prevented the adhesion of *Streptococcus mutans* to the teeth and inhibited the multiplication and growth of lactobacilli. About 15% of the La^{3+} dose applied was detected on the enamel surface 1, 2, and 3 mo after application, but no La^{3+} was detected after 5 mo.

DID not use because

no claim was anticipated by this ref.

① Almost all claims require patient to have a bone disorder.
This ref → Does not have that

② Cl. 18 → requires another bone enhancing agent.

AN 1983:569039 CAPLUS
DN 99:169039
TI Distribution and fate of lanthanum in the tissues of rats administered
lanthanum salt solutions - by means of swabbing the solutions on the teeth
and through stomach tube
AU Sakurai, Yasuo
CS Sch. Dent., Aichi-Gakuin Univ., Nagoya, Japan
SO Aichi Gakuin Daigaku Shigakkaishi (1982), 20(1), 1-19, 3 plates
CODEN: AGDSAB; ISSN: 0044-6912
DT Journal
LA Japanese
AB In rats, the treatment of teeth with a La^{3+} soln. caused replacement of
 Ca^{2+} in the enamel by La^{3+} . Those teeth contained LaPO_4 , $\text{LaP}_5\text{O}_{14}$, and
 LaHP_2O_7 when $>4\%$ La salt soln.s were applied. However, the concn. of La
in the enamel decreased rapidly for a month and then decreased slowly
thereafter. The daily application of La^{3+} solns. increased the La^{3+}
content in the liver, spleen, and femur, and produced the max. content in
1-2 mo. In the femur, most of La^{3+} was incorporated into the medulla.
Although La^{3+} was accumulated in the liver, no significant toxic effects
were obsd. In rats receiving La^{3+} directly into the stomach, the La^{3+}
levels in the liver, spleen, and femur at the 14th day were less than
those obsd. at the 7th day. However, La^{3+} was continuously accumulated in
the kidney.